!KUNG

[54 cont.]

171 of various religions have found entry here. Among the Bushmen
177 tribes I visited there is the common belief in a supreme good be-
171 ing, whose name varies. The people described here [55] call the
176 supreme being X'u, "the lord" or "the great captain" (1). It is

[782]

1. According to Vedder, the supreme being is Huwe (Tsumeb). When the first veld fruits ripen, an offering is brought before sunrise. A freshly broken twig is inserted into a piece of wood with a hole bored through it. The people are seated in a circle, and the eldest passes around a tobacco or dacha pipe made out of a tubular bone.

the same expression that the Cape Hottentot used in speaking to the German traveler Kolbe, with the same significance and pronunciation 705 (2). The name could not have come from the

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2. J. Schapera (The Khoisan Peoples of South Africa, 1930) has critically referred to my observations on this point. In this connection I must note: the "great captain" among the eastern !Kung may rightfully be designated as "supreme being." I have already given his characteristics in my earlier publications.

The spelling is correctly X'u. I use X' to designate a click that is even lower than "!". It is also found in other words, such as X'Ame = lion. Since not all publishers provide this character, I have sometimes been forced to write "Khu" or "Chu." This word, which the !Kung, too, translate as "lord" or "great captain," was already found, as Schapera indicates, among the Cape Hottentot in 1705 as Khourou = "Supreme Ruler" and "Great Chief" or "Great Captain"; Kolbe gives a quite analogous citation a little later, and Hahn reports of one old Nama, "The people say,

[104]
[194]

[CONTINUES ON p. 108 - ANALYST]

/241/

000 Anthropological, Ethnological, and Ethnographic Observations concerning the Heikum and Kung Bushmen (1), with an appendix on the languages of these Bushman Tribes (2).

1. Presented at the session of November 18, 1905 /of the Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte/.

121 2. The linguistic notes on the language of the Heikum Bushmen were gathered on the Omuramba Omatako, while the linguistic notes concerning the Kung Bushmen were taken down in a Kung settlement on the northern edge of the Kaukau Veld, approximately 15 kilometers west of Dobe.

A stay of several months in the vicinity of a Bushman settlement near Otjomavare, a watering place on the Omuramba ua omatako, about 50 kilometers south of Grootfontein and 120 kilometers northeast of Waterberg, gave me the opportunity to make a series of observations on the Bushmen, which, I believe, in part presents new information and in part complements and confirms what is already known. My first concern was to determine the size of the Bushmen, who are traditionally known as abnormally small, by obtaining absolute measurements. A closer acquaintance with this interesting people then led me to make further investigations that will be of interest to the ethnologist and the ethnographer.

I had to manufacture in part the instruments needed for making the anthropological measurements, but I hope that this circumstance has not diminished the accuracy of the results.

101 The Bushmen concerned call themselves "Heikum" people, a
●[194] name in which the 'k' is to be replaced by the click indicated in
124 the Nama language by //. Thirty-one adults and eight children were measured.

Of the adults 14 are men and 17 women.

128 I shall first present the average values of the absolute measurements, and then a number of proportional figures and indices.

/249 cont./

To indicate affirmation the head is thrown back and the 201 eyebrows are raised.

Otherwise, the physiognomic changes of expression are essentially like those of Europeans. Nevertheless, it cannot be denied that the Bushman's facial mobility is considerably greater than that of a European, and even quite weak emotions are expressed by lively gestures.

If I may be permitted, I should like to emphasize here a 194 peculiarity of voice among the Bushmen; among the women especially the voice seems to me abnormally high-pitched. In my opinion the speech of a Heikum woman is pitched several notes higher, on the average, than that of a Herero woman. Evidently this peculiarity is connected with the smallness of the larynx of the Heikum people.

The anthropometric figures presented above are doubtless much 141 smaller than comparable ones for the Herero, Nama, and 144 Bergdamara [Bergdama] living in the immediate vicinity of the Bushmen. Nonetheless, as regards smallness, the Heikum certainly do not approach the Pygmies of Central Africa. Whether further ethnological and ethnographic investigations will uncover kindred traits among these peoples remains to be shown by further research. 144 That the Bushmen represent an almost pure race is apparent from the fact that the skin color is the same for almost all individuals, and from the evident uniformity in the structure of the body, especially of the face. In addition, the other native tribes of Southwest Africa show a pronounced aversion to racial mixture with the despised Bushmen.

I come now to some ethnological and ethnographic observa- 535 tions which to me seem worthy of interest. I was especially [171] interested in the dances of the Heikum, of which one, the //o //au, shows no similarity to any other native dance with which I have become acquainted in Southwest and East Africa.

The //o //au dance (in Kung language: //ooskĕ) is a men's dance in which a series of dueling runs by the performing dancers are represented (Figs. 5 and 6). Six men, three to a side in opposing pairs, kneel in an area about three meters square, with a free space between the two rows. In the middle of this free area there is a pile of veld food. The men kneel down, hunched very

/259 cont./

342 are filled with grass. The door is a hole scarcely a meter high;
[354] immediately behind it the fire burns almost continuously, so that,
at least for the European, crawling into the hut presents con-
siderable difficulties. Since the Bushmen are often forced to
[361] move their settlements because of the lack of veld food or be-
cause of the water conditions, they not infrequently content them-
selves with incomplete huts, which are not closed to form a full
circle, but represent only a part, a segment of a hut, as it were,
and give only scant protection against the sun.

For the rest, it is astonishing how hardened these practically
147 naked Bushmen are against the cold of the night which during the
cold season is very sharp -- not infrequently below 0^{o} [centigrade].
[513] Unclothed except for the loincloth, they calmly go to sleep on
the cold ground near a small fire, exposed to the icy night air,
a thought that gives chills to Europeans, who are unable to sleep
without three woolen blankets on such nights.

Concerning the much discussed racial position of the Bush-
144 men, I have already remarked above -- at least concerning the
Heikum and Kung -- that their descent from the Hottentots, as
is frequently asserted, seems doubtful to me. The Bushmen's
smaller size, of course, can be accounted for by the debilitation
of the race through centuries-long unfavorable living conditions.
What argues against the notion of racial affinity, however, is the
anthropological fact that steatopygia is not to be found among
197 the Heikum and Kung women, /260/ and, in addition, the lan-
guage is totally different.

I attempted to collect a sample of the vocabulary and some
grammatical characteristics of the language of the Heikum on the
Omatako and of the Kung in the Kaukau Veld, which I present
below. In doing this, it became evident that the languages of
the Heikum and Kung are merely dialectically differentiated,
while they seem to have almost no relationship to the Nama lan-
guage. The click sounds, to be sure, are almost the same as
[194] those in the Hottentot language; hence, / designates the dental
click, // the lateral click, ! the cerebral [retroflex] click, and
[104] ≠ the palatal click. By ⋮ I designate the sharp opening of the
glottis in speaking the initial vowel, which frequently occurs be-
tween a consonant and a vowel or between two vowels of the
same word, and which does not occur in this fashion in the Nama.

/267 cont./

16. Numbers

802

English	Heikum	Kung	Name
1	tschin ǂé	tschin ǂé	/ai
2	tschi dzá	tschidzá	/gam
3	tschin /ǎni	tschin /ǎni	/oná
4	unsicher	unsicher	hagá

/268/

5	/gau	/gau (/gau = hand)	—

6-9 quite uncertain among the Heikum and Kung

10	/gau ǂeissen (finger) (toes)	/gau ǂeissen	—

Among the Heikum and Kung one can discover with certainty only the terms for 1, 2, 3, 5, and 10; all the other expressions are uncertain. It is noteworthy that 5 is designated by "hand," and 10 by "hand and toes."

Among the Heikum and Kung Bushmen the manner of counting on the fingers is the same.

To indicate 1, the little finger of the left hand is grasped with the index finger and thumb of the right hand and bent in the hollow of the hand; for 2, 3, and 4, the fourth, third, and second fingers of the left hand follow, and are bent in the hollow of the hand in the same manner. For 6, 7, 8, and 9, the same procedure is used with the right hand as was used with the left for 1, 2, 3, and 4. In order to indicate 10, the two hands, flat but slightly hollowed, are placed against each other with the palms together.

201 The Bushman likes to touch his lower lip briefly with the tip of the little finger of his right hand before he goes through the motions of counting on his fingers.

● 194 It has proved impossible to determine whether in the language of the Heikum or the Kung the change of pitch in the pronunciation of vowels plays a part as it does in the language of the Hottentots.

5:Marshall E-5 (1950-1955) 1957 FX10 Bushmen FX10
Kung

601

Here are the parent–child terms:[1]

Fa	ba (bʰa)[2]
Mo	dai[3] (tʰai)
Mo (voc.)	aiya (āiya)
So	/ha (ŋ/ʰa)
Da	≠khai (ŋ≠kxai)

These terms are subject to no modification. They are used by a person for no other relatives than his biological parents or offspring and no other terms can be applied in these relationships.

Sibling terms are as follows:

elder Br	/go (/o)
elder Si	/kwi (/kwi)
younger Br or Si	tsī (tsī)

The above terms are used for both full and half siblings. These terms are fixed to the sibling relationship in the sense that no other terms replace them under any condition; but, unlike the parent–child terms which are applied to no other relationship, the sibling terms are under certain circumstances extended to other relationships than that of biological sibling.

The generational terms are as follows:

Applied to males	*Applied to females*
tsu (tsū)	ǁga (gǁʰa)
/gu/na (/uŋ/ʰa)	tūn (txūŋ)
tun/ga w.s. (txuŋ.g/a) alternate to /gu/na	

The terms are reciprocal. If a male ego applies the term *tsu* to a man, he is termed *tsu* by that man. Or, if a male ego terms a woman *ǁga*, she terms him *tsu*. It is the same with the */gu/na–tūn* pair.

The above statements are subject to the qualification that, when using these terms, the older person invariably uses a diminutive form for the younger person. We shall list the diminutives here, and then, to avoid being cumbersome, omit them henceforth throughout the text. The diminutive is expressed by adding the suffix *ma*,

[1] The spelling of the Bushman terms used in this paper is an approximation. We represented the Bushman sounds as we heard them as nearly as we could without using symbols except for the clicks. The four clicks are symbolized as follows: dental /, alveolar ≠, alveolar palatal /, and lateral ǁ.

[2] Mr. Ernst Westphal of the School of Oriental and African Studies of the University of London, when he visited our expedition at Gautscha Pan, took down the terms in phonetic symbols as /Kung informants pronounced them. We give his symbols in parentheses the first time the term is given. We wish to express our gratitude to him.

[3] Mr. Westphal spells the term for Mo with a *t* (tʰai), as does Miss Bleek (*tai*). Professor Clement M. Doke, in his outline of the phonetics of the language of the /Kung, *Bantu Studies*, vol. ii (1923–6), pp. 130–65, on p. 150 spells it *ʔai*. We feel apologetic about insisting on *dai*, but we thought we heard the voiced sound *d*. We wondered if the *d* derived from *di* which means female and occurs in the term *di/gusa* which is applied to persons who have the same name as one's mother (cf. p. 9).

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553
[551] 7. Names are occasionally changed.

8. Nicknames are in common use. They are usually descriptive of physical characteristics, such as Gow Umbilicus or Gow Beard.

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601 It must be kept in mind, as the description of the homonymous method of applying terms proceeds, that the /Kung distinguish between being named for, and having the same name as, a person. When one is named for someone, one is brought into the kinship constellation of that person. Merely fortuitously having the same name as someone does not do this to the same degree. We shall at first limit the description to situations where one is *named for* another.

A child is, as we have said, never named for a parent, nor is a child named for a sibling (though they may have the same name). In these categories of relationship, therefore, the homonymous method of applying terms is not operative. In other categories of relationship, however, when a person is named for another, he is, with respect to ego, terminologically taken out of his biological category and classified in the category of the person for whom he is named. Ego applies a term to him according to his homonymous classification.

There are three categories, with respect to ego, into which persons may be classified by their names. (1) The parent–child category: Although ego is never named for his parent, some of his relatives will be. (Some of his nephews and nieces, for example, would certainly be named for ego's Fa or Mo.) When this occurs, ego applies a term to that person which classifies the person with the parent of ego's for whom he or she was named. The terms are *tsu* applied to males, *//ga* applied to females. The terms *ba* and *dai* are applied, as we have said, only to the biological parents. The terms *tsu* and *//ga* are the terms applied to persons in generations adjacent to ego's (i.e. his parents' generation, cf. Diagram 1, p. 6), and are the terms used to classify persons terminologically in the parent category. The same terms would be used for persons named for ego's offspring who again would be terminologically classified as in adjacent generations with respect to ego. (2) The sibling category: If a person is named for ego's sibling, ego classifies him or her terminologically with that sibling and applies the sibling term, i.e. */go* (elder Br), */kwi* (elder Si) or *tsī* (younger Br or younger Si). (3) Ego's category: We consider that the third category is basically ego's category and that it includes persons who are classified by name or generation with ego. Persons may be classified in this category by being named for ego, or for ego's spouse, who is of the same terminological generation as ego. The person for whom ego is named and the spouse of that person are in this category. The way people are classified within it will be brought out as the description proceeds, but more information must first be given about the terms associated with it, namely: */gu!na* (*tun|ga* w.s.) and *tūn*.

The term */gu!na*, unlike any of the other terms, so far as we know, is a translateable word. */Gu*[1] means name, */na* means big or old. The diminutive which derives from the term is */guma*, small or young name. As terms */gu!na* and */guma* always occur modified with the augmentative or diminutive suffix, never simply as */gu*, the word for name.

[114
●194] [1] This is undoubtedly the word which Miss Bleek heard as */ku* (cf. 'Bushman Terms of Relationship', p. 62). It seemed to us particularly difficult to determine, when a word began with the alveolar palatal click, whether the consonant release was voiced or unvoiced. We have two opinions here, Miss Bleek's */ku* and our */gu*. Mr. Westphal hears no consonant, i.e. */ū*.

6:Marshall E-5 (1950-1955) 1957 FX10 Bushmen FX10
Kung

N/OW

LORNA MARSHALL

821 ***N/ow***[1] **is a belief concerning rain and cold which is held by the /Kung Bushmen in the region around Nyae Nyae in South West Africa.**

132 **About ten inches of rain falls in an average year in this part of the Kalahari Desert and sinks into the deep sands. There is no run-off in streams and there are few water**
137 **holes. The rain is sufficient to support a covering vegetation of grass, shrubs, and scrubby trees. The vegetation includes numerous edible roots, tubers, leaves, fruits, and nuts, for which the Afrikaans language provides the convenient word *veldkos*.**

105 **The /Kung, the only inhabitants of the interior of this particular region, are**
821 **nomadic hunters and gatherers. If the rains are poor and the veldkos dry and sparse, the people suffer. Rain, they say, is life-giving; sun is death-giving.**

132 Summer is the season of the ' big rains ' in the western Kalahari. ' Little rains '—a few scant showers—may fall in September, October, and November. The ' big rains ' begin in late December or January and continue into March. The summer storms are awesome. Every day the winds drive monstrous clouds around the sky, which domes a horizon as flat as the sea. They breed the storms. Lightning streaks from them. Thunder roars and rumbles. The earth sucks in their deluges, hissing.

821 The /Kung say that thin clouds which give no rain are male. They call them */now*.[2] The big rain clouds are female. White ones they call *//ga kwe disi*—*//ga* means cloud or rain, *disi* means females.[3] The enormous grey clouds with rain pouring from them the /Kung call */kwesi* (zebras), because they are so fleet and, though a person may think he is far from the rain, it comes swiftly and is on him. We have seen Bushmen, caught without shelter in the storms, shivering so that their teeth chattered, saying they could perish in such rain.

532 Rain itself is male and female, */ga /go* and */ga di*. The men one day drew in the sand the spoor of male and female rain. Male rain spoor was made with all five fingers held stiffly and plunged deeply into the sand, to make big holes. Male rain breaks the trees and beats down the fruits, the men told us. It is (like) a fight, and may kill a person. Thunder and lightning accompany it, and sometimes hail. Female rain has tiny drops and does not spoil anything; it beautifies the trees and the grass and makes the veldkos grow. Its spoor was made by smoothing out a place in the sand and cover-
532 ing it closely with tiny dots. Gao said a person (anyone) may speak to the rain, saying, ' You are doing very well ', or, ' Fall silently. Don't make such a noise. Don't be

[1] We wish to thank both Dr. Mary Douglas and Professor I. Schapera for reading the manuscript about *n/ow* and for making several helpful suggestions.

[2] The /Kung language has four clicks: / is the symbol for the dental click, ≠ for the alveolar, ! for the alveolar palatal, and // for the lateral.

[3] We did not know how to translate *kwe*, which occurs very often. It seemed sometimes to be a sort of article and we did not work on it especially. We regret not having done so because Miss Bleek, in her *Bushman Dictionary* (American Oriental Society, New Haven, Connecticut, 1936), records in the Auen or //K"au-//en language, which she says is very like the /Kung and which she places south of the /Kung, the phrase */ga -k"wisi*, meaning rain's hair or cloud. In /Kung */ga* and *//ga* both mean rain. We now wonder if *kwe* should be *kwi* and if it means hair in the phrase *//ga kwe disi*.

There were more species of grass, and, particularly on the dunes, more of trees and shrubs. The fauna was also richer for there were buffalo and elephant and many waterfowl in addition to the animals found in the Kalahari.

The Bushman languages represented in this paper are classified according to Bleek's *Comparative Vocabularies of Bushman Languages* (1929). They are !h3:, the closely interrelated ǁganakwe, ǀgikwe and Naron, and Auen (see also Bleek, 1928: 60-64).

!h3: is a member of the southern group, in which the lip click is found, and a dialect of what Bleek calls ǀnuǁen, S6 in her system of classification. Bleek's spelling is !k3:, but I heard the click aspirated. It is spoken in the neighbourhood of Lehututu, which is 150 miles south of Ghanzi.

ǁganakwe is spoken to the east of Ghanzi, and has been studied by Maingard (1957).

The centre of the ǀgikwe language appears to be in the country to the south-east of Ghanzi. It is a member of Bleek's Central group, closely allied to Naron and easily understood by Naron speakers although many words are different. A curious feature of the phonetics is the occurrence of the ejective lateral explosive followed immediately by the velar glottal affricate (see Cole, 1955: 23 and Beach 1938: 222-223). The first sound is not mentioned in any papers that I have seen on the Bushman languages.

Naron is Bleek's C2. There is an error which is liable to confuse one on page 3 of her publication, where the languages of the Naron and Masarwa of Tati have been transposed. Naron should be under C2 and the Masarwa language under C1. A grammatical sketch of Naron is given in Bleek's paper of 1928.

Auen, Bleek's N1, is the eastern form of the !khũ linguistic group and is spoken round Gautscha Pan. It was studied by Maingard when he was a member of this same expedition and an account of it is given in his paper of 1957. In this paper I refer to it as Eastern !khũ.

The work done in the Kalahari was done through interpreters, and much of that in the northern area likewise, except towards the end of the expedition when through closer contact with the Bushmen for a longer time than in the south, I was able to acquire a smattering of the Eastern !khũ language, enough to ask straightforward questions and to understand straightforward replies. The phonetics of the Bushman languages are a study in themselves, and I do not claim that my spellings and indications of the tones are exact. In the orthography I have followed Bleek (1929) with the following exceptions:—

1. I have placed the n first when it is combined with a click. It has been the convention to place the n after the click in the written Khoisan languages, the argument being that the n and the click are pronounced simultaneously (Meinhof, 1909: 5). To my ear the n is the first sound in the combination.
2. Bleek does not mention the voiced h, which sometimes follows a nasalised click. I have accordingly followed Doke (1936: 448) and used the symbol ɦ.

For easy reference, the symbols I have used are listed at the end of this introductory chapter.

7:Story N-5 (1955) 1958 FX10 Bushmen FX10

ORTHOGRAPHY.

The following are the approximate values of the letters and symbols used in the spelling of the Bushman names. They have been taken from Bleek's paper of 1929, pages 12-14.

b, d, h, k, l, m, n, p, s, w, z } as in English.
k', t' } as above, but with glottal closure.
g as in *get*.
j as in *yet*.
kˣ the velar glottal affricate.
x as German *ch*.
ŋ as in *sing*.
ʃ as in *ship*.
ʒ as in *vision*.
ɾ the flapped retroflex consonant.
| the dental click.
! the palato-alveolar click.
ǁ the lateral click.
ǂ the alveolar click.
ʘ the lip click.
a: as in *hard*.
a the same sound shortened.
ɑ the same sound produced far back in the throat.
e as in *air*.
e: as in *say*.
ɛ as in *met*.
i as in *hit*.
i: as in *me*.
ɔ: as in *haul*.
ɔ the same sound shortened.
o as in *notice*.
u as in *put*.
ʔ the glottal stop.
¯ over a letter denotes nasal pronunciation.
' over a letter denotes accentuation of the syllable.

The middle tone is not marked, the high tone is marked by a dash above the line preceding the syllable, the low tone by one below the line, as ¯ha, ₋ha; rising and falling tones are marked ʻha and ˌha.

The voiced h is written ɦ.

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10

watching part of a dance. This is not a beauty of the flesh, and therefore exists in everyone who is not an infant or stiff with age. Bushmen have long, slender arms and legs, and the men are built for running, all lean muscle and fine bone, and consequently they often seem younger than they are. They are delicate of proportion, too, and they speak very softly.

Bushmen dress themselves in the skins of animals, a man wearing only a leather loincloth and a woman a small leather apron and a big kaross, a leather cape made from a whole animal hide, belted at the waist with a sinew cord, knotted at the shoulder, forming a pouch in back where a baby can ride, and where the woman carries her blown ostrich eggs, which are used as water containers. Bushmen are a very neat people; they keep their clothes tidily about themselves, and though they do not really need haircuts because their curly hair breaks off by itself, they prefer to keep their hair cropped close to their heads. White ornaments of ostrich-eggshell beads dangle from tufts of their hair and are strung in tiny bands around their arms and knees. Sometimes they wear leather sandals, but mostly their hard brown feet are bare.

The first time we came to the Kalahari, we spent several months looking for Bushmen. It was very hard for us to find them because they are shy of any stranger. If they believe that you are coming, they run away like foxes to hide in the grass until you have gone. Their tiny huts, dome-shaped and made of grass, are also inconspicuous. I once walked right into an empty werf, as their tiny villages are called, and didn't see the little scherms, or huts, hidden in the grass until I noticed a small skin bag dangling in a shadow, which was a doorway. Then I saw the frame of the scherm around it, then the other scherms as well. The werf was abandoned, all the people had slipped away, but I heard two voices whis-

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10

609 pering in the grass near by. You can tell by these werfs that
621 there are Bushmen in an area, and also by their footprints on narrow trails which they share with the game and which run all through the desert. You may find footprints or you
[372] may see a little pile of white ash, the fire that a Bushman kindled where he spent the night. Otherwise, to find them you must depend on luck or on the fact that the Bushmen of an area may have heard something good about you and will not be too afraid.

105 Culturally and historically, the Bushmen are an interesting people, for they and the Hottentots, who belong to the same racial and language groups, are the earliest human inhabit-
[161] ants still living in southern Africa. There are now from thirty to fifty thousand Bushmen, who are divided into several lan-
[197] guage groups. Their languages are related to each other and to the Hottentot language, and are in what is known as the Khoisan language group, made up of most of the click languages spoken in South Africa. A click language has sharp pops and clicks made with the tongue in various parts of the mouth, combined with an implosion of the breath, very diffi-
[194] cult to understand, harder still to pronounce, as the slightest mistake may change the meaning of a word entirely. For example, the work *//kx'a*, which in one of the Bushman languages means *mangetti*, a certain kind of nut-bearing tree, is pronounced by making a lateral click for which the tongue is pulled sharply away from the sides of the mouth, producing the click one makes when calling a horse, followed by a scraped *k* turning to a *g*, followed by a glottal stop—a slight pause or tiny choking sound made as the back of the tongue stops the breath—which is followed at last by the vowel. To make a mistake is easy, and that is why non-Bushmen have a hard time learning the language, and why, when they do learn, they are often misunderstood.

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10
GiKwe

Both men were thin, brown-skinned, and wore nothing but loincloths, and they looked very out of place next to us, among our big trucks and boxes of equipment, squatting naked like two frogs against the long grass and reddening sky of their country. We sat by the fire to talk with them, and it was the old man who answered our questions. His name was Ukwane, and he seemed very old, for he spoke with a hesitant, cracked voice that faded into a whisper at the end of every phrase, and whenever some of us would leave or join the group at the fire he would stare intently at us, frowning, leaning forward a little because he could barely see us, his eyes being filmed with cataracts, hazy blue.

Ukwane had great wrinkles lengthwise down his belly where his paunch had shrunk. His hands were knobbed and his shoulders stiff, yet his legs were as supple as a baby's, for he sat crouched with his knees in the air and his heels tucked up tight against his buttocks. His skin looked old, too, like old leather, hardened and black like a glove that has been left in the rain, and his curly hair was disheveled, uncut, untidy with pieces of straw.

Our questions frightened Ukwane, and often he was at a loss for something to reply. He thought we were policemen coming to look for some lost horses, for somehow a rumor had reached into the farthest corners of the veld that a European farmer had lost seven horses and all the people in the veld were afraid for their lives. The first thing he said was that he hadn't seen any horses and certainly hadn't taken them himself. He was too old, he said. We told him that we were not policemen and, besides, had never heard of the horses, but he was not reassured. He coughed and turned to the young man, who looked at us with nothing to say.

The young man was also very shy, but had a greater dignity than Ukwane because of his cool, proud bearing. He said

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10
Gikwe

very little, and when he did speak it was in a voice so soft that it was almost inaudible. Also, he held his hand in front of his mouth with a finger against his lips, which muffled his words so that only Ukwane could understand them. This was what the young man intended; he meant for the old man to speak for them both and only wanted to help him through tight spots in the conversation.

The young man told us his name, though, which was Gai. Gai sat crouching too, like Ukwane, and kept self-consciously shifting his position, pretending to be unconcerned. He glanced at us out of the corners of his eyes and smiled skeptically from time to time, for although he did not know us and, as we learned later, had not seen Europeans before, therefore had no way of judging our remarks and our expressions, he was younger than Ukwane, and prouder, and was afraid of showing his naïveté, afraid of seeming to believe a lie or disbelieving something that everyone should know was true.

Gai was extremely handsome. In fact, he was one of the most beautiful human beings I have ever seen, tall for a Bushman, his head shaved, showing a strong, domed skull. His face was strong, too, a little heavy of bone, with a big jaw which he carried thrust forward and up so that he looked at you from the bottom of his eyes, a reserved gaze. His body was smooth and brown, built compactly, the body itself long in proportion to the arms and legs. Like all Bushmen, he was narrow of shoulder and hip, with a deep chest and a large belly, and when seen from the side as his belly relaxed he seemed wider from front to back than he was from side to side, very like a hunting animal whose chest is deep but narrow. Gai was also well dressed, not with a strip of leather like Ukwane, but with a beautifully designed, worked, and fringed loincloth with two wide tabs at the back which he could spread to sit on. He wore a band around his hips, too,

9: Thomas T-5 (1951-1955)1959
FX10 Bushmen FX10
Gikwe

as a belt for the loincloth, with a fringe of leather strips so long that when he sat down the fringe lay on the ground.

We asked them where they lived, and Ukwane, who was afraid to answer, said he was old and did not remember. Gai said they lived many days' journey to the east. We asked if the huts beside our camp belonged to them, and they said no, they had never seen them before, neither did they have the slightest idea how they came to be there.

We gave them some more tobacco as a gesture of our good faith and we told them that we had come from America, hundreds of days' travel and across a great body of water, but of course they had never heard of America or the ocean and thought we meant the Okovango River, and at that they didn't really believe us, although they were too polite to tell us so. "Merica," they said softly, with a beautiful, curled *r*, almost a *d* or an *l*. We said that we had come to visit them and to give them presents. We said that we were the friends of many Bushmen in the west where we had lived for a year, and had been given Bushman names, so we weren't entirely strangers. We told them the names, which made them smile, because of course they weren't Gikwe names, but Gai and Ukwane softened a little with this and admitted that, after all, the huts were theirs.

Finally they told us that a few nights ago they had been sitting at their fires, the two men, their wives and children, and one other family, when they had heard the sound of our trucks, which had frightened them so that they had run off into the veld in all directions, taking nothing with them except the few possessions that had come first to hand. Ukwane, warming a little, said that he had been so terrified that he had crawled away on his hands and knees, afraid to show his head above the tops of the bushes.

Presently they had found each other again and had settled

10: Bleek E-5 (no date) 1924
FX10 Bushmen FX10

NOTE ON BUSHMAN ORTHOGRAPHY

By D. F. Bleek

IN writing the article on "Bushman Terms of Relationship" appearing in this issue of *Bantu Studies*, I have tried to follow the phonetic script of the International Phonetic Association, as far as I understand it, except for denoting clicks. For these I should be willing to use the symbols chosen by Mr. Doke for Zulu clicks, were they adequate for expressing all the click combinations found in Bushman; but they are not.

Had Mr. Doke seen fit to adopt one symbol for each implosive sound, regardless of the accompanying breathed sound, I could have used these symbols for three of the Bushman clicks. But unfortunately Mr. Doke has not followed that course, but has chosen three symbols for each implosive sound denoting a combination of the implosive sound with the sound made by the expulsion of the breath.

Every click has a double closure, one made by the front or tip of the tongue against the teeth, alveolar, or palate, or of the lips together, the other by the back of the tongue against the velum, as Mr. Doke has shown in his admirable experiments. In making the click alone, only the front closure is audibly released, the back closure might stay in position, for all we know, no breath being emitted from the lungs. We cannot call that click either unvoiced, voiced, or nasal. But in speaking, this implosive sound is accompanied or followed by breathed sounds. The back closure being in the position for "k" or "g", if the air is pressed against that closure while the click is made, it will produce a slight "k" or "g" sound in rushing out. These sound combinations are called by Mr. Doke and others unvoiced and voiced clicks. If the uvula is lowered while making the click, a nasal sound is produced.

For these three combinations Mr. Doke provides symbols. All three are found in Bushman, the first in very many examples; but there are words in which not the slightest "k" or "g" sound is audible with the click, the back release is silent. In others the back release is silent, but an aspirate follows before the vowel. Again, there may be a treble closure: front of tongue, back of

10: Bleek E-5 (no date) 1924
FX10 Bushmen FX10

104 114 194 tongue, and glottis. The front of the tongue is released first, making a click, then the back is exploded, making a sort of glottal plosive. The fricative "x" may also be combined with the click. For these clicks or combinations of sound there is no provision in Mr. Doke's system, so to avoid confusion I have followed the old custom of all writers on Bushman and Hottentot, and used a sign for the click alone, expressing the other sounds by their ordinary symbols.

104 194 This may best be shown by examples. We find the dental or alveolar click in the following combinations:—

Bushman spelling.	English.	Mr. Doke's spelling.	Old Bantu spelling.
ǂa	to fight		
ǂka	to leave	ʇa	ca
ǂkha	stick	ʇha	c'a
ǂha	husband		
ǂxã	to shoot		
ǂk'a	river bed		
ǂga	hippopotamus	ʒa	gca
ǂna	head	ɲa	nca

The retroflex plosive click is found in the following combinations:—

Bushman spelling.	English.	Mr. Doke's spelling.	Old Bantu spelling.
ǃa	along		
ǃkã	to await	ʗa	qa
ǃkhau	bee	ʗhau	q'au
ǃham	first		
ǃxa	sister-in-law's husband		
ǃk'ao	to skin		
ǃgã	frog	ɢa	gqa
ǃna	winter	ɴa	nqa

These combinations can be found with the retroflex fricative click, which corresponds more or less to the lateral click of Bantu. Bushmen do not make this click with the tongue against the teeth or side of the mouth, but place it in about the same position as for the last click, only they release it gently, as in making the dental click. I give as examples:—

10: Bleek E-5 (no date) 1924
FX10 Bushmen FX10

Bushman spelling.	English.	Mr. Doke's spelling.	Old Bantu spelling.
ǂa	to go		
ǂka	wet	ʖa	xa
ǂkhā	lion	ʖha	
ǂhagen	to equal		
ǂxā	again		
ǂk'ą ǂkwi	son's father-in-law		
ǂga	night	ŋa	gxa
ǂna	there	ɳa	nxa

\ below the line indicates a low intonation.

The same combinations can be found with the alveolar plosive click, which is made as the retroflex plosive click, only with the tongue pressure very far forward, almost on the teeth. For example :—

Bushman spelling.	English.
ǂabbakn	to burn
ǂkā	bare
ǂkhàra	wingfeather
ǂhau	to jump
ǂxamma	to fetch
ǂk'anna	to call
ǂgabbetn	to throw
ǂna	to forget

The fifth click, found only in Southern Bushman, is made by pressing the lips together and then sucking the air in. It is found in the following combinations :—

ʘpwa little, ʘbu to rain gently, ʘhe tree, ʘmwainya to kiss.

In his "Notes on a problem in the mechanism of Zulu clicks", Mr. Doke speaks as if no "k" sound were heard in what he calls the "unvoiced" clicks. I think most people hear a very slight "k". Colonials, in using Zulu or Kafir names, very often omit the click and say the rest of the word as they hear it. They always get a "k" sound, *Cetywayo* becomes **Ketywayo**, *X'osa* becomes **Khosa**, and so forth. I do not know of any Bantu names with clicks that have turned into words beginning with a vowel on the lips of Colonials.

On the other hand Hottentot place names, when adopted by Colonials and stripped of their clicks, sometimes become words

10: Bleek E-5 (no date) 1924
FX10 Bushmen FX10

000 beginning with "k", such as *Kakamas, Karakhois*, from ǂkakamas, ǂkarakhois; and sometimes turn into words beginning with a vowel, as *Aus, Abiam, Oas*, from ǂaus, ǂabiam, ǂoas.

Moreover, by speaking of "unvoiced" clicks, Mr. Doke shows 104 that he is thinking of the expulsion of breath from the lungs, not 114 merely of the implosive phone, the click proper. In spite of my ●194 disagreeing with him on this point, I would adopt his symbols, were they adequate for Bushman transcription. As it is, I stick to the old signs long identified with the Hottentot and Bushman clicks, and sufficing for all purposes, rather than inventing a whole row of new symbols.

000 To Dr. Beech I tender hearty thanks for his kind help in explaining the phonetic script of the I.P.A., which would otherwise have remained a closed book to me. I only hope that this attempt at Bushman transcription may be clear to other students.

142
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A Headman ǂToma is the leader of the main Guatscha band.

142 males average approximately five feet, two inches) with yellowish brown skin that becomes heavily wrinkled in old age. They have very little facial and body hair, and their short, black, head hair is so curly it spirals into peppercorn tufts. The Bushman face is flat and triangular; the brown eyes are set rather wide apart. A variety of eye folds narrow the apertures of the eyes. The nose is extremely broad with a very low bridge, the lips are everted but not protruding or only slightly so, and the ear is somewhat square in shape with a deeply rolled rim (helix). The Bushman body and limbs are slender; the frame is delicate. A notable feature is the inward curve of the small of the back. The penis is semierect. In women there is what is called the "Hottentot apron" (elongation of the *labia minora*). Steatopygia (fat on the buttocks) is invariably mentioned in the literature as one of the important physical characteristics of Bushman and Hottentot women and recorded as being very prominently developed in some. By comparison with the extreme examples that are seen among some Hottentot women and in illustrations, the northern and central Bushman women whom we observed did not have marked steatopygia, although some had buttocks that could be called plump.

197 LANGUAGE • Bushman languages and those of the Hottentots are classified as a language family known as Click or Khoisan (Greenberg 1955:80). [194] Clicks are so unusual as to be almost unique to Bushman and Hottentot (they occur also in two East African languages—Sandawe and Hatsa—according to Greenberg) and are so distinguishing a feature of these languages that much attention is given them.

194 The Khoisan clicks, striking implosive sounds, are velaric suction stops
197 (Heffner 1960:119; cf. Beach 1938:73 ff.). The northern and central Bushman languages have four, made with the tongue, as follows: the dental (/), lateral (//), alveolar (!), and palatal (ǂ). The southern Bushman lan-

15: Marshall E-5 (1951-1961) 1965
FX10 Bushmen FX10
!Kung

guages, some now virtually extinct, were characterized by a fifth click made with the lips, called the kiss click (⊙). In addition to clicks, the Bushman languages have tones: high, middle, low, rising, and falling. Oswin Köhler has given special attention to tone as well as to other features in his study of Bushman languages, especially Barakwenga (Köhler 1962).

Each of the large divisions of the Bushman languages—the northern, central, and southern divisions (see Bleek 1956)—differs markedly from the others. Within each group are several languages, sometimes resembling each other enough to be considered merely dialects of the same language, but more often differing so widely as to be distinct, mutually quite unintelligible languages. The !Kung described in this chapter (Köhler's and Westphal's !Xũ) belong to the northern group.

HABITAT • The Kalahari Desert, some 1200 miles long, with a mean high altitude of about 3000 feet, forms part of the great plateau of southern Africa. It is a basin in form, covered with wind-blown sands, sometimes red, sometimes white, to a depth of 300 to 400 feet. The underlying rock crops out rarely in ridges and a few low hills.

Stamp (1953:78) classifies the Kalahari as a semidesert. Its conditions are not the most extreme. Our expeditions recorded daytime air temperatures in the shade up to 115° F. and sand temperatures in the sun up to 140° F. In winter the temperature at night falls below freezing but for most of the year the nights are temperate. Although they seem acclimated to the heat, the Bushmen appear to find the colder temperatures very uncomfortable and shiver violently if they are away from their fires when the cold south winds blow.[8]

The rainfall, which comes in summer thunderstorms—6 to 10 inches, increasing in the better-watered parts toward the north, according to Wellington (1955:61)—though slight, is sufficient to sustain a varied drought-resistant vegetation, and the country is covered with grass, brush, and scant small trees. In the northern and northwestern parts, the trees are more numerous and taller and include shivi groves and nut-bearing mangetti—important sources of food to the Bushmen. And in all the areas of the desert that Bushmen inhabit are found edible plants, in scant, far-apart patches perhaps, but existing. The vegetation, furthermore, provides material for fires, shelter, weapons, implements, tanning, poison for arrows, and juices (for example tsama melons, on which these people can live when there is no water). In short, this desert provides the things that make life possible; otherwise the Bushmen would be dead or somewhere else.

The desert is a forceful shaper of the outlines of Bushman culture, and both the possibilities it permits and the limitations it imposes have been meaningfully summarized by Robert Story in a personal communication:

and we worked jointly at Dobe until the study terminated on January 8, 1965. The study dates and places are summarized in Table 1.

A note on orthography

The linguistic status of the !Kung Bushmen will be discussed in Chapter II. As there is still no general agreement among linguists on the phonemes of the !Kung language, a brief list of phonemes is offered here to facilitate the pronounciation of Bushman words used in the text.[1]

Vowels

1. i - as in English "fit, feet"
2. e - as in English "fate, fed"
3. ə - as in English "the, but"
4. u - as in English "book, boor"
5. o - as in English "bore, ball"
6. a - as in English "bat, bar"

Dipthongs

7. au - as in "cow, now, thou"
8. ai - as in "by, sky, bite"
9. ei - close to "bay, bait"
10. iu - no English equivalent; falls between "see" and "Sue"

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[1] A phonemic analysis of !Kung is in preparation and will be presented elsewhere. The present listing is oversimplified.

• 194

Consonants

11. b - as in English "bug"
12. d - as in English "die"
13. g - as in English "guy"
14. m - as in English "my"
15. n - as in English "nigh"
16. ŋ - as in English "sing"; as in Bantu "ngombe"
17. s - as in English "sigh"
18. z - as in English "zoo"
19. š - as in English "shy"
20. ž - as in French "jamais"
21. x - as in Afrikaans or Dutch "groote"
22. h - as in English "home"; also to indicate aspiration after a vowel or consonant
23. w - as in English "why, twin"
24. ts - as in Bantu "tsetse"
25. tz - no English equivalent
26. tč - as in English "church"

In addition there are a number of phonemes that are exotic to most speakers of English.

Clicks

27. / - dental click, produced by drawing the tip of the tongue sharply away from the lingual (back) surface of the upper incisors. In some dialects of English

• 194

it is used to denote mild reproach. The sound is sometimes written "tch tch".

28. ǂ - alveolar click; the tongue position is the same for the dental click, but the blade (not the tip) is drawn sharply away. This produces a flat popping sound of shorter duration than the sound of the dental click.

29. // - lateral click; the tip of the tongue is pressed against the alveolar ridge, but the sound is produced by drawing the lateral edges of the tongue sharply away from the lingual side of the cheek teeth; the sound produced resembles that used when urging on a horse. There is no way of putting this into writing.

30. ǃ - alveolar-palatal click; the tongue tip is pressed against the roof of the mouth and drawn sharply away; a hollow popping sound is produced.

31. ' - glottal stop; a brief closure of the vocal cords which does not in itself produce a sound but colors the following sound material by making its release more abrupt, as in the pronunciation of "bottle" in some Scottish dialects.

32. ʔ - glottal flap; this sound apparently has never been described in human language. Pike's (1943,1947) exhaustive studies of phonetics and phonemics do not

• 194

mention it. This is a glottal stop with a distinctly audible flap of the surfaces of the glottis. In !Kung it is one of the most common sounds following clicks.

33. r - dental-alveolar flap: this sound appears only medially in words. It has some of the sound quality of "l", "r", and "d" in the series: pallette, parrot, padded, when each is pronounced rapidly.

In addition there are three kinds of suprasegmental phonemes in !Kung: tone, nasality, and vowel pressing.

Tone There are five tone levels. The symbols are illustrated below, using a series of !Kung words that are distinguished by tone.

34. ¯di - "female" (high tone)

35. _di - "heavy" (low tone)

36. \di - "lightning" (low-falling tone)

37. ´di - species of insect (high-rising tone)

38. di - "crazy" (mid tone, no diacritic marker)

Nasality All vowels may be nasalized and this is phonemic. The symbol is the nasal modifier "˜" above the vowel.

39. ĩ, ẽ, ɛ̃, ũ, ɔ̃

Pressing All vowels may be pressed or pharyngealized. This is represented by a dash below the affected

• 194 vowel. Thus:

40. i, e, ɑ, u, o

(Vowels that are both pressed and nasalized have both the subscript and the superscript viz: ĩ, ẽ, etc.)

The Bushman alphabet

For purposes of this study the !Kung Bushman alphabet reads as follows:

a, b, d, e, ə, g, h, i, m, n, ŋ, o, r, s, š, ts, tǂ, tz, u, w, x, z, ž, /, ǂ, //, :, ', ".

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot FX13
Bushmen FX10.

Hottentots. The nature of the relationship between these two peoples has given rise to much discussion. They are unquestionably allied in race, and, indeed, in appearance and bodily characters resemble each other so closely as to have often been confused. There are certain features, such as stature and the shape of the head, in which the Hottentots are actually found to differ somewhat from the Cape Bushmen, but differences of the same nature exist even between the Northern Bushmen and those of the Cape.

The two peoples also have much in common in language. Their speech has the same phonetic basis, characterized especially by the occurrence of several "click" consonants; many roots in the Hottentot languages are found with the same meanings in various Bushman languages; while in grammatical processes and categories there is also a fundamental correspondence, more particularly between the Hottentot and the Central Bushman languages. At the same time, the Hottentot languages have certain grammatical features, such as sex-gender, sex-denoting particles and a dual number, which do not occur in any of the Bushman languages save that of the Naron.

In culture the differences are more readily apparent. While the Bushmen are hunters and collectors only, the Hottentots in addition are a pastoral people, with herds of long-horned straight-backed cattle and flocks of fat-tailed hairy sheep. They were also able to smelt metal ores for the manufacture of their implements, weapons, and ornaments, while the Bushmen have never learned to do so and still obtain whatever iron they use by barter from their more advanced neighbours. The Hottentots, again, do not appear ever to have possessed the art of painting and engraving on rock, so remarkable a feature in the culture of the Southern Bushmen; but, then, it should be noted, there is no direct evidence either that the Northern Bushmen were acquainted with this art. In social organization, habits, and customs there are likewise many far-reaching differences, but at the same time, as we shall see, the similarities in some respects are by no means insignificant. In religion, on the other hand, the similarities are occasionally very striking, although here again there are also important differences of detail.

All these points, both of resemblance and of difference, will be analysed below and discussed more in detail. It must here be mentioned, however, that the common elements indicated are on the whole significant enough to warrant the conclusion that the Hottentots are basically of the same racial stock as the Bushmen, and

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot FX13
Nama
Bushmen FX 10.

as representative of the Southern Group.[1] Grammatical sketches are also available of */Khũ* (*Kung*) and *//K'au //en* (*Auen*), representing the Northern Group, and of *Hie* (the language of the Hiechware or "Tati Masarwa") and *Naron*, representing the Central Group[2]; but of the other Bushman languages, and this includes the great majority of those spoken in the Kalahari Desert at the present time, only short vacabularies at best have so far been published. Of the four Hottentot languages, again, the only one fully available for comparison is *Nama*, of which we possess several good grammatical studies and dictionaries.[3]

The following sketch in no way claims to provide a complete or even adequate comparative study of the Khoisan languages. It is intended merely to illustrate briefly the principal features characteristic of them, to show how far these features are shared by them all, and what differences exist. A note must be added on the method adopted in the discussion of grammar. This will be dealt with under two heads: (*a*) Grammatical Processes or Technique, i.e. the various mechanisms employed for the expression of meanings, and (*b*) Syntax, i.e. the ways in which the various grammatical categories are expressed. In the former case we consider the different formal processes of the languages and note what their functions are; in the latter we consider the different grammatical functions and categories and note the formal processes employed to express them. The two parts are therefore complementary, and between them should give a serviceable picture of the general grammatical structure.

Phonetics[4]

Except in the case of */Khũ* and *Nama*[5] no detailed scientific studies have been made of the phonetic systems of the Khoisan languages.

[1] Bleek and Lloyd, *Bushman Folklore*, 1911 (texts); D. F. Bleek, "Bushman Grammar," *Z. EingebSpr.*, xix (1928–9), 81–98; Meriggi, "Versuch einer Grammatik des */xam*-Buschmännischen," ibid., 117–53, 188–205.

[2] Vedder, "Grundriss einer Grammatik der Buschmannsprache vom Stamm der !Kũ-Buschmänner," *Z. KolSpr.*, i (1910–11), 5–24, 106–17; Dornan, "The Tati Bushmen (Masarwas) and their Language," *J. R. Anthrop. Inst.*, xlvii (1917), 37 ff., esp. 56–112; D. F. Bleek, *The Naron*, 1928 (Grammatical Sketches: Naron, 51–60; Auen, 60–4); cf. also Schinz, *Deutsch-Südwest-Afrika*, 1891 (Naron grammar and vocabulary, 540–52).

[3] The most useful sources are: Meinhof, *Lehrbuch der Nama-Sprache*, 1909 (grammar and texts; bibliography); Schultze, *Aus Namaland und Kalahari*, 1907 (texts 387–545); Vedder, *Die Bergdama*, vol. ii, 1923 (texts in the Bergdama dialect, 62–131); Kroenlein, *Wortschatz der Khoi-Khoin*, 1889 (best dictionary).

[4] The orthography employed in the following pages and throughout the book is that recommended by the International Institute of African Languages and Cultures in its Memorandum I: *Practical Orthography of African Languages*, except in the case of the "clicks", for which the long-established conventional symbols are used.

[5] Doke, "The Phonetics of the Language of the ǂhũ Bushmen," *Bantu Studies*, ii (1925), 129–65; Meinhof, *Lehrbuch der Nama-Sprache*, 1–44.

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot FX13
Nama
Bushmen FX 10.

Certain general features of importance shared by them all are readily observable, however. The vowels in many cases have a more or less obscure sound, i.e. they are slurred in pronunciation and their qualities are indefinite, so that several varieties may be heard of what is essentially the same vowel sound. Most vowels occur either long or short, and this length is at times a determining factor between words otherwise alike. Almost all the vowels, further, may be nasalized, and the presence or absence of nasalization is a factor in distinguishing words of different meanings otherwise phonetically identical. Diphthongs, finally, are very numerous.

The consonants are subdivided into emitted consonants and reversed or implosive consonants. In the former class, "in the production of which the whole movement of the speech organs emits or drives the air outwards," velar and alveolar explosives, fricatives, and affricates predominate, which, in conjunction with the "clicks", give the languages a harsh staccato character. The affricate combinations are almost all unvoiced and ejective, i.e. accompanied by simultaneous glottal stop. Nasals are also very often heard in speech. On the negative side may be noted the absence of the labio-dentals *f* and *v* and the semi-vowel *l*, except occasionally in words incorporated from European languages.

The reversed or implosive consonants, "in the production of which the whole or a portion of the movement of the speech organs reverses or draws the air inwards," are the famous and much-discussed "clicks". They are produced by rarefying the air between some outer closure or point of tongue articulation and an inner closure formed either at the velum or the glottis, and then releasing the outer closure so that the air is sucked in sharply. The inner closure is subsequently released for the following vowel. The position of the outer closure varies with the different kinds of click. Four different positional types of click are used in all the Khoisan languages: dental, customarily represented by the symbol /; alveolar, ǂ; palato-alveolar (sometimes called cerebral), !; and lateral, //. Each of these may be pronounced unvoiced, voiced, or nasal, and in various combinations with other consonants. In the Southern Bushman Group there is further a bilabial unvoiced velaric click ("kiss click"), ., not met with elsewhere, while *!Khũ* also has a fifth type of click, the retroflex.

The grouping of sounds and the character of the syllable follow the same principles throughout. Single vowels, diphthongs, nasal

2: Schapera E-4, 5 (no date) 1930
FX13 Hottentot FX13
Nama
Bushmen FX10.

B H 194 consonants, or nasal clicks alone often form complete syllables and whole words. Generally, however, syllables are made up of either (*a*) a consonant or consonant combination with following vowel or diphthong, or (*b*) a consonant or consonant combination, a vowel or diphthong, and a terminal consonant, which is invariably a nasal. Very many syllables commence with a click, and the quick succession of these clicks in speech is an outstanding feature in all the languages.

The variation of the musical pitch of the syllable is another most important feature of the Khoisan languages. Many words, phonetically alike, but bearing different meanings, are differentiated tonetically, the tone distinction being their only distinguishing feature in speech. Five significant tone levels have been discovered—high level, mid level, low level, falling, and rising. What part, if any, tone inflexion plays in syntax, in showing the relation of one idea to another, either expressed or unexpressed, is as yet quite uncertain. In this respect, as in many others, a good deal of work still remains to be done in the phonetic investigation of these languages.

Grammatical Processes

B H 193 Grammatical categories and syntactic relationships are expressed in a variety of ways, some of which are common to all the languages, while others are found in only a few of them. The main grammatical processes employed in all the Khoisan languages may be classified as follows: (*a*) the modification of the form of the radical element by (1) the use of a complex apparatus of suffixes, (2) the reduplication of the radical element, and (3) composition, the uniting into a single word of two or more different radical elements; (*b*) the extensive use of grammatical words or "auxiliary particles"; and (*c*) word order, the combination in a definite sequence of two or more denotative concepts to provide a new denotative concept.

(*a*) The radical elements of Khoisan words are to a very large extent, if not altogether, monosyllabic, and any additional elements can usually be shown to have a functional significance. Prefixes are altogether lacking, and infixes very few; the principal mechanism for modifying the form of the radical element so as to express a new denotative concept lies in the employment of suffixes.

(1) The apparatus of suffixes is very complex, and they are used for many different purposes. In some cases, although it is clear that the second syllable of a word is a suffixed element, it is difficult to determine the function of this suffix. As an illustration we may take